



Revenue Business Cycle Report



UTAH GOVERNOR'S OFFICE OF
MANAGEMENT AND BUDGET

EXECUTIVE SUMMARY

Each year, the Office of the Legislative Fiscal Analyst and the Governor's Office of Management and Budget compare tax revenue projections with historical trends. Lawmakers then determine how to allocate the projected revenue depending on whether the revenue can be counted upon into the future or whether it might be anomalous. For FY 2022, combined General and Education Fund projections appear to be very much on-trend - \$79 million below trend based on raw collections, \$20 million above trend correcting for income tax timing policy interventions. Federal funds for the same period appear to be about \$530 million above trend for FY 2021 and about \$261 million below trend for FY 2022.

ANALYSIS

UCA [36-12-13](#) and [63J-1-201](#), require an annual review of the fifteen-year revenue trends associated with major tax types. Specifically, statute requires: a projection of estimated revenues by major tax type; fifteen-year trends for each major tax type; estimated receipts of federal funds; and fifteen-year trends for federal funds receipts.

Consistent with prior versions of this report and based on historical revenue figures, analysts this year again identified a revenue trend that would have been expected absent any business cycle. They did so using a fifteen-year time series of collections by tax type. In performing the analysis, analysts applied a Hodrick-Prescott (HP) filter to the data using a lambda value of 25. HP filters smooth variable data over time and may capture cycles better than straight-line trends. The lambda value determines how flat or wavy an HP trendline might be. Lower lambda values produce flatter lines. After performing the HP method, analysts then compared the trend to FY 2021/2022 consensus revenue estimates.

GENERAL AND EDUCATION FUND REVENUE

Without adjusting for a delay in income tax filing from FY 2020 to FY 2021, analysts calculate that \$638 million of projections is above trend for FY 2021 and \$79 million of projected General and Education Fund revenue is below-trend for FY 2022¹. Correcting for the income tax filing delay, analysts estimate projected General and Education fund collections are \$103 million below trend in FY 2021 and \$20 million above trend in FY 2022.

Table 1 on the next page and Table 2 on page 3 summarize trend and point estimates for each broad revenue source affecting the General and Education Funds. Figure 1 on page 4 breaks-down the cycle component of General and Education Fund revenue, without correcting for timing, by revenue type. Figures 2 through 5 provide a time-series view of select revenue types, with the green line in the top pane capturing the trend, the orange line capturing the actual or estimated revenue, and the red bars in the bottom pane capturing the estimated trend component of the relevant point estimate.

¹ These figures do not include sales tax earmarks. To provide broader view, at the end of this report are two figures depicting the business cycle associated with total sales tax revenue.

TABLE 1: CYCLE/TREND WITH NO ACCOUNTING FOR THE TIMING SHIFT IN INCOME TAX PAYMENTS

Summary (millions \$)

General Fund	FY 2021 Trend	FY 2021 Cycle	FY 2022 Trend	FY 2022 Cycle
Sales tax (GF only)	\$2,375	\$22	\$2,504	\$39
Cable tax	\$28	\$0	\$28	\$0
Liquor profits	\$126	-\$3	\$131	\$0
Insurance premiums	\$149	-\$1	\$157	-\$1
Beer, cigarette, and tobacco	\$107	-\$1	\$105	\$0
Oil and gas severance	\$11	\$0	\$7	\$6
Metal severance	\$9	\$0	\$9	\$2
Investment income	\$21	-\$7	\$21	-\$8
Other	\$94	-\$1	\$96	-\$2
Property/Energy Credit	-\$6	\$0	-\$6	\$0
Sub-Total	\$2,915	\$10	\$3,052	\$35
Education Fund				
Individual income tax	\$4,927	\$636	\$5,270	-\$77
Corporate tax	\$405	-\$8	\$403	-\$32
Mineral production withholding	\$23	-\$1	\$23	-\$1
Escheats & Other	\$34	\$2	\$35	-\$5
Sub-Total	\$5,388	\$628	\$5,732	-\$114
Total, GF + EF	\$8,303	\$638	\$8,784	-\$79
Federal Funds	\$5,127	\$530	\$5,409	-\$261

TABLE 2: CYCLE/TREND ACCOUNTING FOR THE TIMING SHIFT IN INCOME TAX PAYMENTS

Summary (millions \$)

General Fund	FY 2021 Trend	FY 2021 Cycle	FY 2022 Trend	FY 2022 Cycle
Sales tax (GF only)	\$2,375	\$22	\$2,504	\$39
Cable tax	\$28	\$0	\$28	\$0
Liquor profits	\$126	-\$3	\$131	\$0
Insurance premiums	\$149	-\$1	\$157	-\$1
Beer, cigarette, and tobacco	\$107	-\$1	\$105	\$0
Oil and gas severance	\$11	\$0	\$7	\$6
Metal severance	\$9	\$0	\$9	\$2
Investment income	\$21	-\$7	\$21	-\$8
Other	\$94	-\$1	\$96	-\$2
Property/Energy Credit	-\$6	\$0	-\$6	\$0
Sub-Total	\$2,915	\$10	\$3,052	\$35
Education Fund				
Individual income tax	\$4,876	-\$49	\$5,179	\$15
Corporate tax	\$401	-\$64	\$396	-\$25
Mineral production withholding	\$23	-\$1	\$23	-\$1
Escheats & Other	\$34	\$2	\$35	-\$5
Sub-Total	\$5,334	-\$112	\$5,633	-\$15
Total, GF + EF	\$8,249	-\$103	\$8,685	\$20
Federal Funds	\$5,127	\$530	\$5,409	-\$261

FIGURE 1: REVENUE ABOVE OR BELOW TREND BY BROAD SOURCE FOR FY 2022 (THE CYCLE)

Revenue Above or Below Trend by Broad Source for FY 2022 (The Cycle)

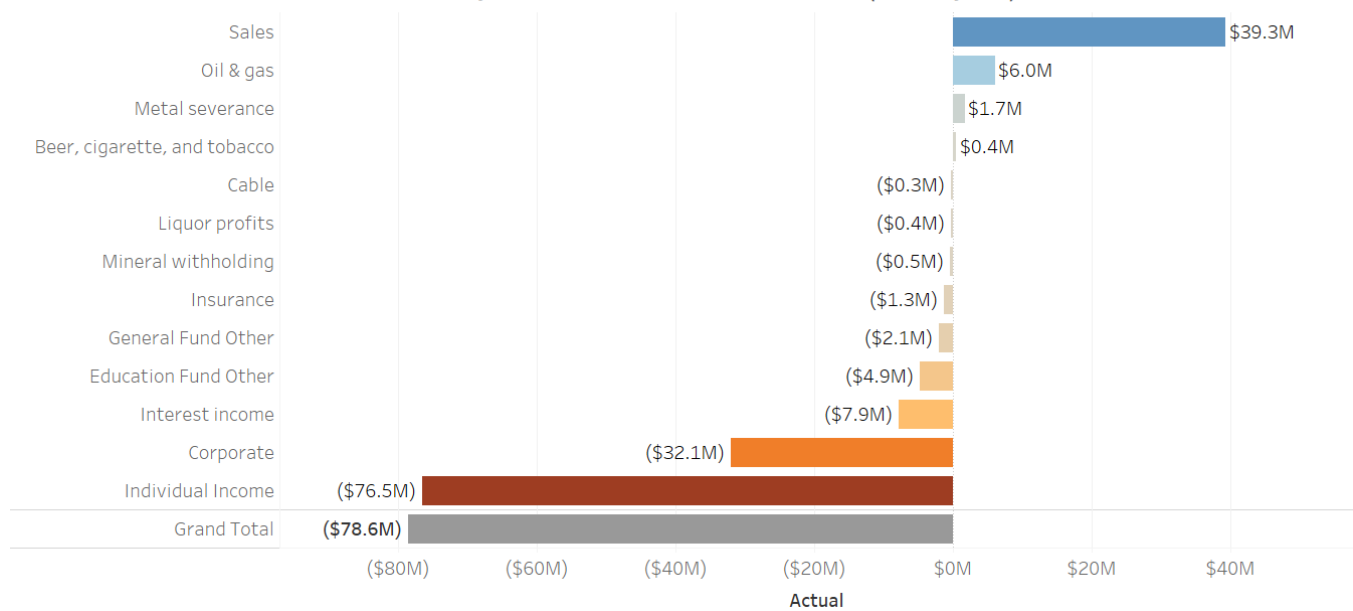
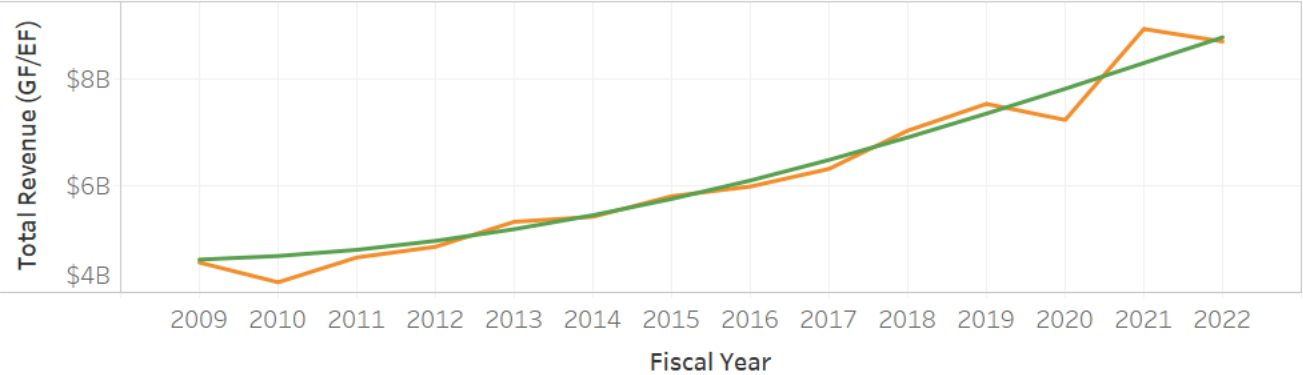


FIGURE 2: GF/EF REVENUE HISTORY, ASSOCIATED TREND, AND GF/EF CYCLE

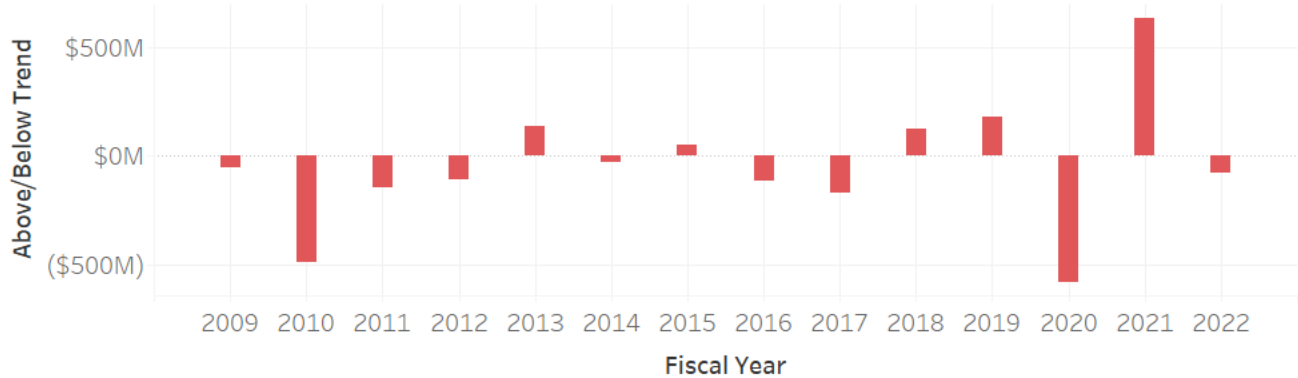
Measure Names

■ Total GF/EF Revenue ■ Trend GF/EF Revenue

Revenue History and Associated Trend



GF/EF Cycle

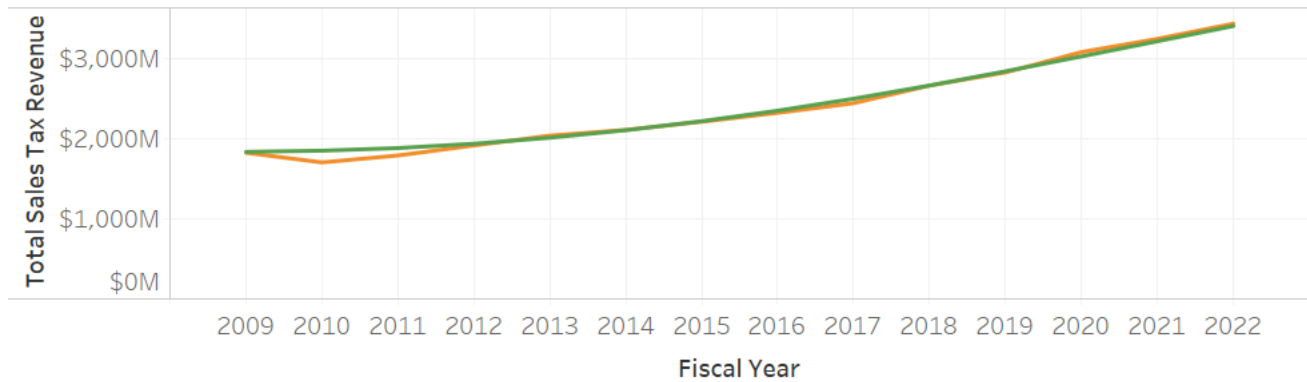


The following Figures 3 captures the business cycle and trend of total sales tax revenue². The HP filter would suggest that sales tax will be \$30.4 million above trend in FY 2021 and \$29.7 million above trend in FY 2022.

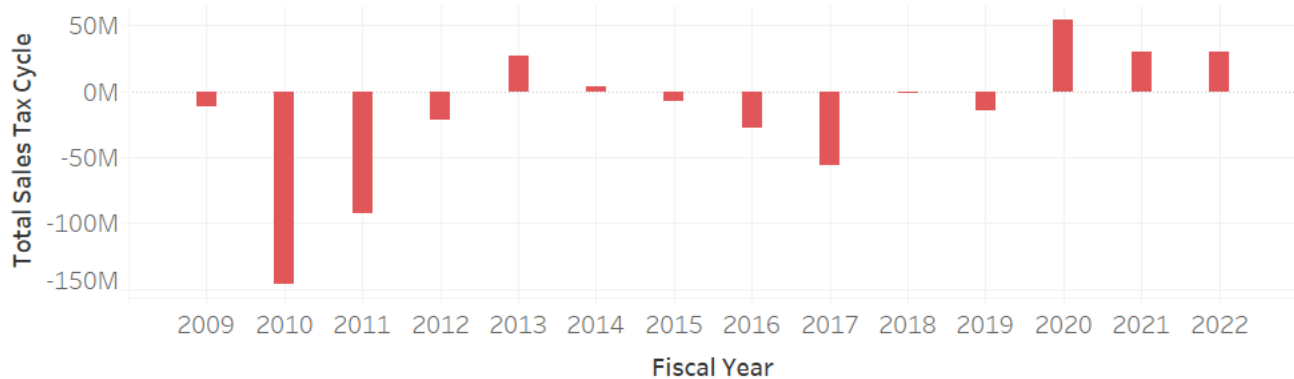
FIGURE 3: BUSINESS CYCLE ASSOCIATED WITH TOTAL SALES TAX

Measure Names
■ Total Sales Tax
■ Total Sales Tax Cycle

Total Sales Tax



Total Sales Tax Cycle



² Total sales tax means sales tax deposited in the General Fund and sales tax earmarks.

The following Figure 4 looks at the business cycle associated with individual income tax.

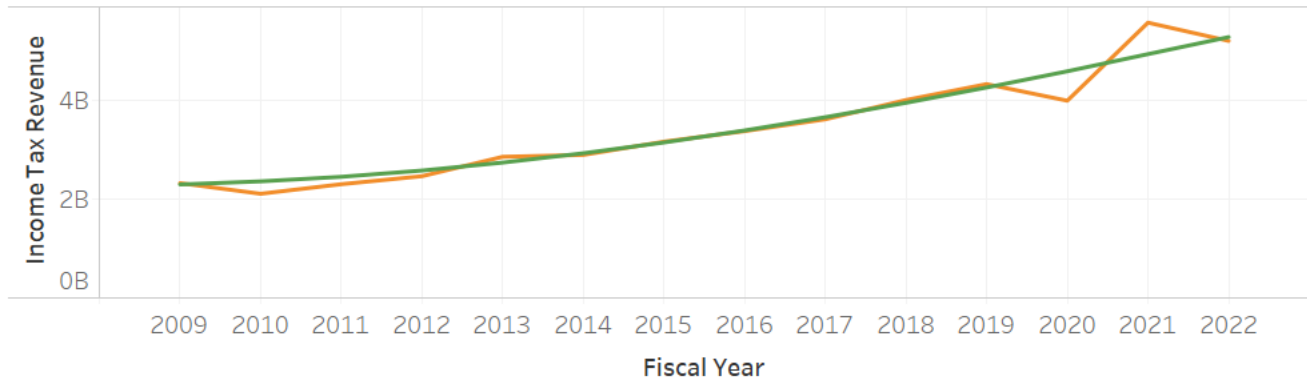
FIGURE 4: INCOME TAX REVENUE HISTORY, ASSOCIATED TREND, AND INCOME TAX CYCLE

Measure Names

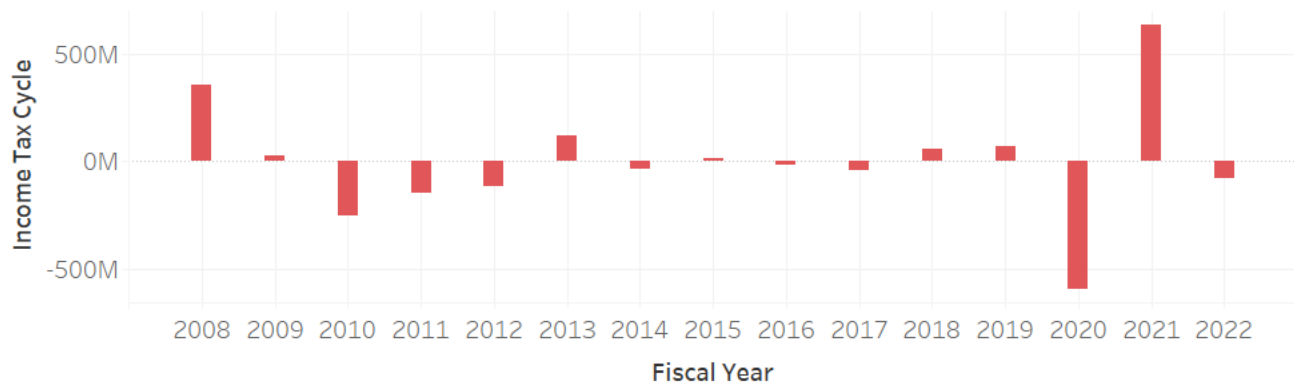
Income Tax

Income Tax Trend

Income Tax

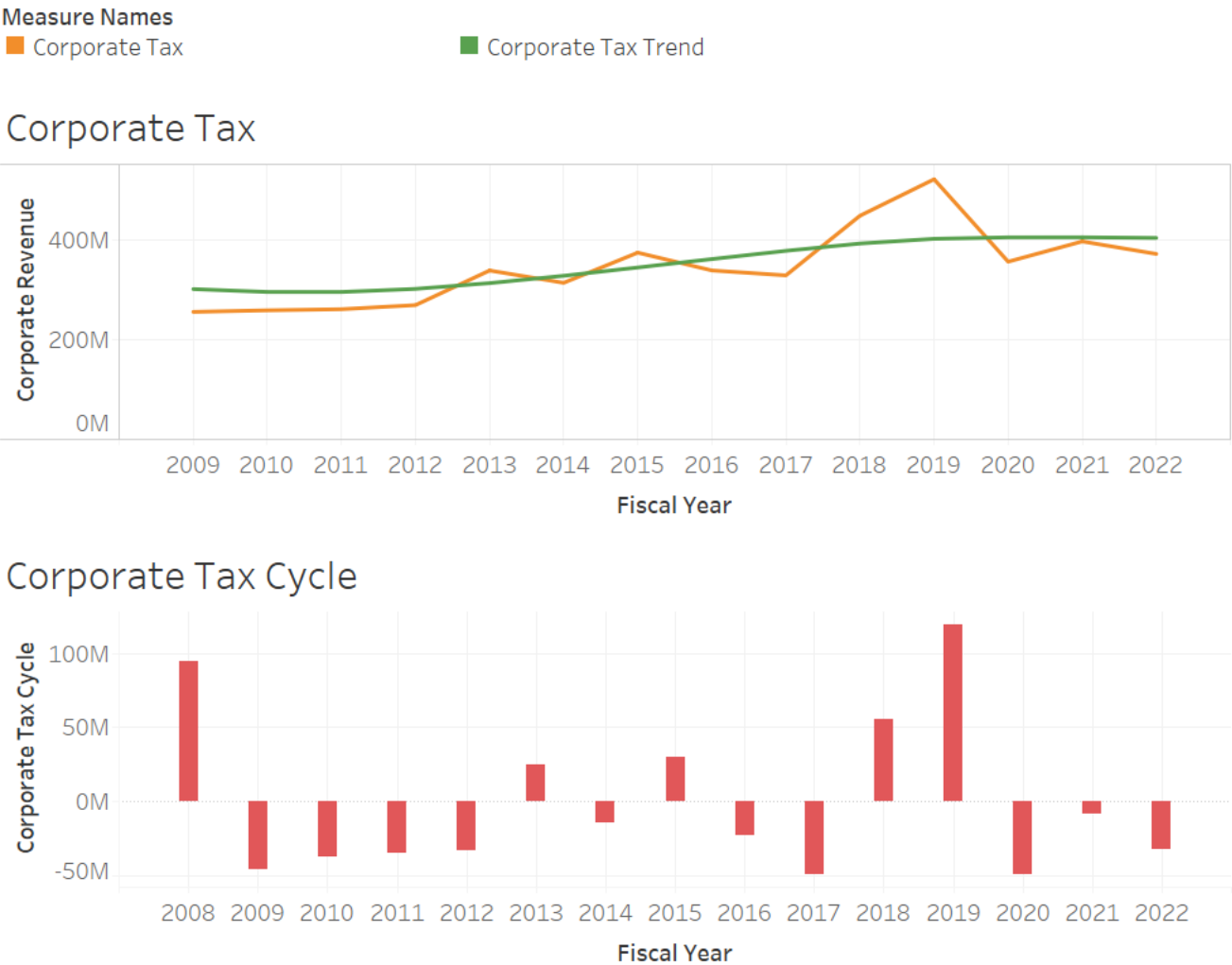


Income Tax Cycle



The following Figure 5 looks at the business cycle associated with corporate income tax.

FIGURE 5: CORPORATE TAX REVENUE HISTORY, ASSOCIATED TREND, AND CORPORATE TAX CYCLE



FEDERAL FUNDS

Statute ([UCA Section 63J-1-205](#)) also requires that the revenue volatility report consider federal funding included in the state budget and discuss any projected changes in the amount or value of federal funding.

In FY 2022, Utah is expected to receive \$5.1 billion in federal funds, approximating 29% of the total budget. Major programs funded by federal funds include Medicaid (\$3.21 billion), public education programs and school lunches (\$367 million), transportation projects (\$416 million), the Supplemental Nutrition Assistance Program (\$250 million), and Temporary Assistance for Needy Families (\$64 million).

While the concept of normalizing and evaluating funding flows against 15-year trends has been statutorily popularized in recent years, it is difficult to estimate changes in federal funding with precision because it is uncertain what actions Congress will take with the federal budget or exactly how entitlement programs will respond to changes in the economy. Additionally, anomalies in federal funding, such as the sharp increase in federal funds in FY 2020 and FY 2021 due to the COVID-19 pandemic, can have dramatic effects on trendlines. Senate Bill 209, “Budgeting Revisions,” of the 2017 General Session requires the Governor’s proposed budget to the Legislature to include a projection of 15-year trends of federal funds receipts. Numerous statistically acceptable methods for calculating the trend of a time-series exist and final “over/under” trend determinations are very sensitive to the methods selected. When using a Hodrick-Prescott filter to decompose the 15-year timeseries of federal funds, it is estimated that Utah’s receipt of federal funds in FY 2021 will be about \$530 million above trend and about \$261 million below trend in FY 2022.

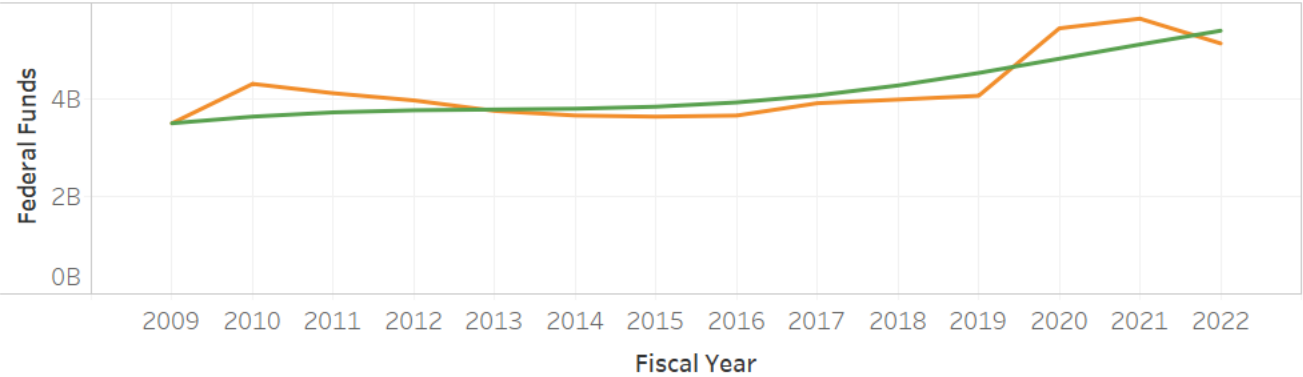
The following Figure 6 looks at the business cycle associated with federal funds.

FIGURE 6: FEDERAL FUNDS REVENUE HISTORY, ASSOCIATED TREND, AND FEDERAL FUNDS CYCLE

Measure Names
Federal Funds

Federal Funds Trend

Federal Funds



Federal Funds Cycle

